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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,811

01/21/2004

Jin Ho Hyun

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6196

35884

7590

03/30/2009

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EXAMINER

SCHNURR, JOHN R

ART UNIT

PAPER NUMBER

2421

NOTIFICATION DATE

DELIVERY MODE

03/30/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@hlaw.com  
ip.hlaw@gmail.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/762,811	<b>Applicant(s)</b> HYUN, JIN HO	
	<b>Examiner</b> JOHN R. SCHNURR	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/23/2009 has been entered.

**DETAILED ACTION**

2. Claims 1 and 4-6 are pending and have been examined.

***Response to Arguments***

3. Applicant's arguments filed 12/30/2008 have been fully considered but they are not persuasive. Please refer to the response to the arguments found in the advisory action dated 01/14/2009.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **1 and 4-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader et al. (US Patent Application Publication 2002/0166123)**, herein Schrader, in view of **Freeman et al. (US Patent Application Publication 2001/0013123)**, herein Freeman, and further in view of **Killian (US Patent 6,163,316)**.

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Consider **claims 1 and 6**, Schrader clearly teaches a digital broadcast storage device using a mark-up language. **(Fig. 5: Shows a DVR 530 for receiving and storing digital broadcast data, [0078] Schrader. The received data may be transmitted as Extensible Markup Language (XML), [0047].)**

user interface means for allowing EPG (Electronic Program Guide) information to be used and searched; **(Fig. 8 shows a display of a user navigation guide which enables the user to use or search program information with display area 816 or course navigation bar 818. [0103])**

metadata processing means for processing received XML (Extensible Markup Language)--formatted EPG information **(Fig. 5: Receiver 120 receives and processes XML data. [0047] and [0080]-[0082]),** storing the processed EPG information in a storage medium **(Fig. 5: Mass storage device 542 stores the processed broadcast information. [0086]),** and parsing the stored EPG information **(The stored EPG information is parsed to create user interface displays, [0102].)**

searching means for searching the stored EPG information using at least one of a title, a keyword or a genre according to a user's request and providing the searched information to user through a user interface means; **(Fig. 8: Navigation guide 800 allows the user to search the broadcast information using a genre, in this case a sports genre is selected and presented in area 816, [0103]-[0104].)** and

controlling means for controlling the processing, storage and searching of the received and parsed EPG information. **(Fig. 5: Processing unit 532 controls operation of the STB 120. [0085])**

Schrader further teaches that the device contains information about viewer preferences, [0091]. However, Schrader does not explicitly teach extracting the preferences based on either user input or from a watch record based on digital broadcasts previously accessed by the user.

In an analogous art, Freeman, which discloses a system for receiving digital broadcast information, clearly teaches preference extracting means for extracting a preference that is either directly input by a user or automatically created from a watch record based upon specific digital broadcasts previously accessed by the user. **(User preference information may be directly input from the user or it may be collected based on the programming selections of the user. [0031])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader by obtaining the

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viewer preference information directly from the user or from the viewing history of the user, as taught by Freeman, for the benefit of providing programming that is of interest to the viewer (See [0008] Freeman).

Schrader further teaches storing the processed EPG information in a storage medium (**Fig. 5: EPG database 548 stores the EPG data, [0086].**). However, Schrader combined with Freeman does not explicitly teach storing processed EPG information in a storage medium using a database management API.

In an analogous art, Killian, which discloses a system for implementing an EPG, clearly teaches storing EPG information in a storage medium using a database management API. (**Fig. 2: Toolkit 58 includes APIs 60. These APIs can be used for manipulating program listing information stored in database 48, col. 4 lines 14-17; column 6 line 63 to column 7 line 7; column 7 lines 49-58.**)

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader and Freeman by using APIs to store the EPG information in a storage medium, as taught by Killian, for the benefit of allowing third party applications to utilize the functionality of the user device (See column 6 lines 32-56 Killian).

Consider **claim 4**, Schrader modified by Freeman and Killian, as in claim 1, clearly teaches a digital broadcast storage device using a mark-up language.

database managing means (**CPU 532, application specific integrated circuit (ASIC) 534, mass storage device 542. Schrader**) for managing information of the storage means; (**The system maintains a meta-data directory of recorded programs, index files and control files. [0127] Schrader**)

media file system managing means (**DVR device 530, mass storage device 542, Schrader**) for managing a file system; (**FIGS. 17a through 17c illustrate an association of various enhanced files with a DVR index file. [0134] Schrader**) and a

media router (**video output circuit 560**), **Schrader** for controlling a peripheral device (**display device 122, Schrader**).

Consider **claim 5**, Schrader modified by Freeman and Killian, as in claim 1, clearly teaches a digital broadcast storage device using a mark-up language.

a media management engine adapted to manage at least one of recording and reproduction of at least one of digital video and digital audio (**Fig. 5:**

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**ASIC 534 is coupled to system memory 538 and storage device 542 to permit data to be read from and written to the system memory, [0085] Freeman. Video data 550, digital programming [0040] Freeman, is stored on the mass storage device 542. [0086] Schrader)**

a metadata processing engine adapted to process and store the XML-formatted information; **(Fig. 16b and 16c: The system maintains a meta-data directory containing program information obtained from the XML formatted data. [0127] Schrader)**

an XML parsing engine adapted to parse the stored XML-formatted information. **(Data processing engine is adapted to process the received XML data. [0094] Schrader)**

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN R. SCHNURR whose telephone number is (571)270-1458. The examiner can normally be reached on Monday - Friday, 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN W. MILLER/  
Supervisory Patent Examiner, Art Unit 2421

JRS